



#### STS-102 FLIGHT READINESS REVIEW

FERRY READINESS February 27, 2001



### SPACE SHUTTLE PROGRAM Space Shuttle Vehicle Engineering Office NASA Johnson Space Center, Houston, Texas



# STS-102 Flight Readiness Review Ferry Readiness

Date Feb. 27, 2001

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#### **Ferry Plan Summary**

- Ferry Planning Readiness Review conducted on 2/16/01 with no issues identified
- Ferry Flight Readiness Review to be conducted one day prior to planned ferry date
- Hardware summary:
  - Orbiter: OV-103 (Discovery)
    - NEOM Ferry Weight (lbs): 218940 (No Fluids Off-loaded)
    - NEOM Ferry Center of Gravity (in): Xo 1116.7 Yo -0.9 Zo 373.0
      - » NEOM mass properties are within specified limits
  - Attach hardware and ferry plugs are ready to support
  - Tailcone 1 (to be used on OV-104) will be ready for transport to DFRC on 3/12/01
  - Shuttle Carrier Aircraft (SCA): NASA 905
- Configuration drawings have been released



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#### **Ferry Plan Summary - Continued**

- DFRC seven day turnaround with ready-to-ferry on day eight (early morning) the turnaround plan is under review
- Flight plan:
  - Day 1: Edwards AFB, CA to Dyess AFB, TX
    - Dyess AFB, TX to Eglin AFB, FL (Rest Overnight)
  - Day 2: Eglin AFB, FL to KSC SLF, FL
- Weather alternates and emergency landing fields selected
- Pathfinder: USAF C-141 or C-17 (based on availability)
- Purge decision to deploy purge equipment based on predicted temperatures at potential ferry overnight stop locations
  - Purge circuit 2 (MPLM)
  - Purge circuit 1 (OMS/RCS, ambient temperature below 45 °F)



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#### **STS-102 FERRY READINESS STATEMENT**

A Ferry Planning Readiness Review was conducted in accordance with the Space Shuttle Vehicle Engineering Office flight preparation process plan contained in NSTS 08117, Requirements and Procedures for Certification of Flight Readiness. This certifies that aircraft, equipment, and ferry requirements are ready to support Orbiter ferry operations.

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